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2 **ABSTRACT**  
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4 An implementation is described herein facilitates certification of goods  
5 and/or identifications of the source of such goods. At least one implementation,  
6 described herein, embeds a watermark into a relatively small amount of data in a  
7 deterministic manner. At least one implementation, described herein, generates an  
8 authentication transformation matrix based, at least in part, upon an authentication  
9 watermark and a pre-defined humanly perceptible authentication pattern (e.g.,  
10 image, audio). With this implementation, it obtains subject goods that *may* have  
11 the authentication watermark embedded therein. It generates a humanly  
12 perceptible resultant pattern (e.g., image, audio) based, at least in part, upon the  
13 watermark detected in subject goods and the transformation matrix. If the  
14 detected watermark is the authentication watermark, then the resultant pattern and  
15 the pre-defined authentication pattern will match (or nearly so). At least one  
16 implementation, described herein, hides a secret key around the periphery of  
17 watermarked goods. This abstract itself is not intended to limit the scope of this  
18 patent. The scope of the present invention is pointed out in the appending claims.  
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